REMARKS

Claims 1 through 37 are pending in this application. Reconsideration is requested based on the following remarks.

Response to Arguments:

The Applicant appreciates the consideration of the arguments in the response filed January 28, 2004.

Claims 1, 34, and 36:

The Office action asserts that Li '682 provides a suggestion to use a filament lamp, such as one disclosed in Fjaestad, at column 4, lines 35-41. Column 4, lines 38-40, however, caution that filament lamps can be used for certain applications "provided that the system is modified to accommodate the non-opaque filaments of the lamps." It is submitted, therefore, that persons of ordinary skill in the art who read column 4, lines 35-41 of Li '682 would have been deterred from modifying claims 1 and 2 as proposed in the Office action because the system would not have been modified to accommodate the non-opaque filaments of the lamps, and, if it were, neither claim 1, 34, nor 36 would result.

Furthermore, M.P.E.P. § 804(II)(B)(1) prohibits the use of the disclosure of Li '682 as prior art in a double-patenting rejection. Although those portions of the specification which provide support for the patent claims may be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in a patent, the disclosure may not be used as prior art. To do otherwise would be to use the inventor's own disclosure against him. Only claims 1 and 2 are at issue. Citing column 4, lines 35-41 is therefore submitted to be an inappropriate use of Li '682.

The Office action asserts, with respect to claim 36, that "putting a reflector having a light source at the focal point causes the reflector to collect light emitted by the first reflector." Although this may be, the Office action still needs to show a motivation or suggestion why persons of ordinary skill in the art at the time the invention was made would have chosen to make the reflectors *symmetrical*, not simply supplied reflectors at all. The stated motivation, to ensure that most of the light is collected by the second reflector, is not a property generally associated with symmetrical reflectors. In fact, non-symmetrical reflectors, in which the secondary or collecting reflector is much larger than the primary reflector, would be much better

at ensuring that most of the light is collected by the second reflector. This is why the motivation stated in the Office action teaches away from the claimed invention: if persons of ordinary skill in the art truly wanted to ensure that most of the light is collected by the second reflector they would have made the secondary reflector larger than the primary reflector, not symmetrical with it.

Claim 2:

The Office action asserts that column 4, lines 35-41 of Li '682 provides motivation to combine Li '682 with Fjaestad or Strobl '600. M.P.E.P. § 804(II)(B)(1), however, prohibits the use of the disclosure of Li '682 as prior art in a double-patenting rejection, as discussed above. Furthermore, persons of ordinary skill in the art who read column 4, lines 35-41 of Li '682 would have been deterred from modifying claims 1 and 2 as proposed in the Office action because the system would not have been modified to accommodate the non-opaque filaments of the lamps, as required by column 4, lines 39 and 40, and, if it were, neither claim 1, 34, nor 36 would result, as also discussed above.

The Office action points out that "motivation does not have to come from the references, it can come from 'knowledge generally available to one of ordinary skill in the art' (M.P.E.P. 2143)." The Applicant understands that motivation can come from knowledge generally available to one of ordinary skill in the art. The Applicant is merely asking for some evidence to support the assertion in the Office action that the combination of elements recited in claim 2 constituted knowledge generally available to one of ordinary skill in the art at the time the invention was made. In the absence of evidence, such an assertion is only an opinion.

Claim 4:

The Office action asserts that column 4, lines 35-41 of Li '682 provides motivation to combine Li '682 with Fjaestad or Strobl '700 as discussed above. M.P.E.P. § 804(II)(B)(1), however, prohibits the use of the disclosure of Li '682 as prior art in a double-patenting rejection, as discussed above. Furthermore, persons of ordinary skill in the art who read column 4, lines 35-41 of Li '682 would have been deterred from modifying claims 1 and 2 as proposed in the Office action because the system would not have been modified to accommodate the non-opaque filaments of the lamps, and, if it were, neither claim 1, 34, nor 36 would result, as also discussed above.

The Office action asserts that Strobl '700 provides motivation at column 37, lines 65-67. Strobl '700, however, is discussing a tungsten filament lamp with a RRS 140 that is designed to focus back onto the filament at column 37, lines 56 and 57. Claim 4 recites no RRS, and there's no reason to believe an embodiment of Strobl '700 that was intended specifically for an RRS would be applicable to claim 4. Furthermore, Strobl '700 only discusses the benefits of heating tungsten *electrodes*, not filaments, at column 37, line 61, and thus provides no reason to believe that there would be any benefit to heating filaments, contrary to the assertion in the Office action.

Claims 5 and 6:

The Office action asserts that column 4, lines 35-41 of Li '682 provides motivation to combine Li '682 with Fjaestad or Dorman. M.P.E.P. § 804(II)(B)(1), however, prohibits the use of the disclosure of Li '682 as prior art in a double-patenting rejection, as discussed above. Furthermore, persons of ordinary skill in the art who read column 4, lines 35-41 of Li '682 would have been deterred from modifying claims 1 and 2 as proposed in the Office action because the system would not have been modified to accommodate the non-opaque filaments of the lamps, as required by column 4, lines 39 and 40, and, if it were, neither claim 1, 34, nor 36 would result, as also discussed above.

The Office action points out that "motivation does not have to come from the references, it can come from 'knowledge generally available to one of ordinary skill in the art' (M.P.E.P. 2143)." The Applicant understands that motivation can come from knowledge generally available to one of ordinary skill in the art. The Applicant is merely asking for some evidence to support the assertion in the Office action that the combination of elements recited in claims 5 and 6 constituted knowledge generally available to one of ordinary skill in the art at the time the invention was made. In the absence of evidence, such an assertion is only an opinion.

Finally, although a product can have two features, as pointed out by the Office action, motivation, to be rational, ought to be consistent. If the Office action is going to assert that persons of ordinary skill in the art would have done a particular thing at the time the invention was made, they should also do that particular thing again under the same circumstances. To say otherwise is just hindsight.

Claims 7, 9 and 10:

The Office action asserts that column 4, lines 35-41 of Li '682 provides motivation to combine Li '682 with Fjaestad and Goldenberg. M.P.E.P. § 804(II)(B)(1), however, prohibits the use of the disclosure of Li '682 as prior art in a double-patenting rejection, as discussed above. Furthermore, persons of ordinary skill in the art who read column 4, lines 35-41 of Li '682 would have been deterred from modifying claims 1 and 2 as proposed in the Office action because the system would not have been modified to accommodate the non-opaque filaments of the lamps, as required by column 4, lines 39 and 40, and, if it were, neither claim 1, 34, nor 36 would result, as also discussed above.

The Office action asserts that Goldenberg provides motivation to combine the references in the Background at column 1, lines 5-12, for the purpose of providing "an illumination system for use in projection displays having a light valve in the form of a liquid crystal display illuminated by light emitted from the output aperture of the non-imaging reflector". Goldenberg, however, already *provides* an illumination system for use in projection displays having a light valve in the form of a liquid crystal display illuminated by light emitted from the output aperture of the non-imaging reflector, as described at column 1, lines 5-12. There would thus have been no need to modify Goldenberg as proposed in the Office action at the time the invention was made. Persons of ordinary skill in the art could have simply used the illumination system of Goldenberg as is, if all they wanted to accomplish was the purpose asserted in the Office action. Goldenberg, in fact, is complete in itself. The passage cited in the Office action offers no explanation as to why persons of ordinary skill in the art at the time the invention was made would have felt otherwise.

Claim 8:

The Office action points out that "motivation does not have to come from the references, it can come from 'knowledge generally available to one of ordinary skill in the art' (M.P.E.P. 2143)." The Applicant understands that motivation can come from knowledge generally available to one of ordinary skill in the art. The Applicant is merely asking for some evidence to support the assertion in the Office action that the combination of elements recited in claim 8 constituted knowledge generally available to one of ordinary skill in the art at the time the invention was made. In the absence of evidence, such an assertion is only an opinion.

Furthermore, the motivation provided, to conduct light, is already a characteristic of each

of the references separately. Since each of the references conduct light separately perfectly well, it is submitted that there would have been no reason at the time the invention was made to modify them as proposed in the Office action, since it would have served no purpose.

Claims 28, 35 and 37:

The Office action asserts that column 5, lines 15-20 of Li '820 provides motivation to combine Li '820 with Fjaestad. M.P.E.P. § 804(II)(B)(1), however, prohibits the use of the disclosure of Li '820 as prior art in a double-patenting rejection, as discussed above.

The Office action points out that "motivation does not have to come from the references, it can come from 'knowledge generally available to one of ordinary skill in the art' (M.P.E.P. 2143)." The Applicant understands that motivation can come from knowledge generally available to one of ordinary skill in the art. The Applicant is merely asking for some evidence to support the assertion in the Office action that the combination of elements recited in claims 28, 35 and 37 constituted knowledge generally available to one of ordinary skill in the art at the time the invention was made. In the absence of evidence, such an assertion is only an opinion.

Furthermore, there is no reason to suspect claim 28 of Li '820 would have benefitted from collimated light, and the reflector already reflects light, so collecting it is not, presumably, an issue. The stated motivation "to collimate and collect most of the light" is thus submitted to have been no motivator to modify claim 28 of Li '820 as proposed in the Office action.

Claim Rejections - Double Patenting:

Claims 1, 34, and 36 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of Li, US 6,227,682 (Li '682) in view of the Fjaestad et al., US 5,873,646. The rejection is traversed. Reconsideration is earnestly solicited.

Claim 1 recites, in pertinent part:

"a filament lamp."

Neither claims 1 or 2 of Li '682 teach, disclose, or suggest a filament lamp. The Office action seeks to remedy the deficiencies of claims 1 and 2 of Li '682 by combining claims 1 or 2 of Li '682 with Fjaestad.

The Office action, however, provides no motivation or suggestion to combine the teachings of claims 1 and 2 of Li '682 with Fjaestad as required by the M.P.E.P. §804, beyond

an assertion that persons of ordinary skill in the art at the time of the invention would have modified claims 1 and 2 of Li '682 in this manner "to provide a filament image on the reflectors."

"It is insufficient that the prior art [discloses] the components . . . either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor." *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990), *cert. denied*, 498 U.S. 920 (1990).

"When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references." *In re Rouffet*, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998); see also M.P.E.P. § 2143.01. Virtually all inventions are combinations of old elements. *See In re Rouffet*, 47 USPQ2d at 1457.

If identification of each claimed element in the prior art were sufficient to negate patentability, the Office action could use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. *See Id.* To prevent the use of hindsight based on the teachings of the patent application, the Office action must show a motivation to combine the references in the manner suggested. *See Id.* at 1457-1458.

Actually, there is no teaching in either claims 1 or 2 of Li '682 or in Fjaestad that would have led persons of ordinary skill in the art at the time of the invention to modify claims 1 or 2 of Li '682 in the manner proposed in the Office action. Nor does the Office action describe why persons of ordinary skill in the art would have wanted an image of a filament on a reflector at the time the invention was made.

Claims 1 and 2 of Li '682, in fact, already recite an image source. Claims 1 and 2 of Li '682 are complete in themselves. It is submitted that persons of ordinary skill in the art who read claims 1 and 2 of Li '682 and Fjaestad for all they contained would have seen no reason to modify claims 1 and 2 of Li '682 in the manner proposed in the Office action. Furthermore, there is no indication in either claims 1 and 2 of Li '682 or Fjaestad that a filament image would have been any improvement over an image source. Claim 1 is thus submitted to be allowable. Withdrawal of the rejection of claim 1 is earnestly solicited.

Claims 34 and 36 depend from claim 1 and add additional distinguishing elements. With respect to claim 36, the motivation cited in the Office action is submitted to teach away from the

claimed invention. If persons of ordinary skill in the art at the time the invention was made had wanted "to ensure that most of the light is collected by the second reflector portion" they would have made the second reflector portion *larger* than the first reflector portion, not symmetrical with it. Claims 34 and 36 are thus also submitted to be allowable. Withdrawal of the rejection of claims 34 and 36 is earnestly solicited.

Claim 2 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of Li '682 in view of the Fjaestad, and further in view of Strobl, US 5,414,600 (Strobl '600). The rejection is traversed. Reconsideration is earnestly solicited.

Claim 2 depends from claim 1 and adds further distinguishing elements. There is no teaching in either claims 1 or 2 of Li '682 or in Fjaestad that would have led persons of ordinary skill in the art at the time of the invention to modify claims 1 or 2 of Li '682 in the manner proposed in the Office action, as discussed above with respect to claim 1.

Strobl '600 provides none of the requisite motivation either, and thus cannot make up for the deficiencies of claims 1 and 2 of Li '682 in view of the Fjaestad with respect to claim 2. Claim 2 is thus submitted to be allowable. Withdrawal of the rejection of claim 2 is earnestly solicited.

Claim 4 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of Li '682 in view of the Fjaestad, and further in view of Strobl, US 6,356,700 (Strobl '700). The rejection is traversed. Reconsideration is earnestly solicited.

Claim 4 depends from claim 1 and adds further distinguishing elements. There is no teaching in either claims 1 or 2 of Li '682 or in Fjaestad that would have led persons of ordinary skill in the art at the time of the invention to modify claims 1 or 2 of Li '682 in the manner proposed in the Office action, as discussed above with respect to claim 1.

Strobl '700 provides none of the requisite motivation either, and thus cannot make up for the deficiencies of claims 1 and 2 of Li '682 in view of the Fjaestad with respect to claim 4. There is no reason to believe that claims 1 and 2 of Li '682 needed a higher color temperature to operate more efficiently in the first place, contrary to the assertion in the Office action. Claim 4 is thus submitted to be allowable. Withdrawal of the rejection of claim 4 is earnestly solicited.

Claims 5 and 6 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of Li '682 in view of the Fjaestad, and further in view of Dorman, US 4,149,227. The rejection is traversed. Reconsideration is earnestly solicited.

Claims 5 and 6 depend from claim 1 and add further distinguishing elements. There is no teaching in either claims 1 or 2 of Li '682 or in Fjaestad that would have led persons of ordinary skill in the art at the time of the invention to modify claims 1 or 2 of Li '682 in the manner proposed in the Office action, as discussed above with respect to claim 1.

Dorman provides none of the requisite motivation either, and thus cannot make up for the deficiencies of claims 1 and 2 of Li '682 in view of the Fjaestad with respect to claims 5 and 6. Furthermore, filament lamps generally function better the hotter they are. Persons of ordinary skill in the art at the time the invention was made would have had no reason to apply a coating to dump the infrared spectrum, contrary to the assertion in the Office action, since to do so would have reduced the efficiency of the proposed combination. Furthermore, the motivation asserted here, namely, "to take the infrared portion of the spectrum out of the light, resulting (in) cool light", is apparently in conflict with the motivation asserted at paragraph 4 of the Office action with respect to the rejection of claim 4, "to achieve a higher color temperature and operate more efficiently." Claims 5 and 6 are thus submitted to be allowable. Withdrawal of the rejection of claims 5 and 6 is earnestly solicited.

Claims 7, 9 and 10 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of Li '682 in view of the Fjaestad, and further in view of Goldenburg et al., US 4,956,759. The rejection is traversed. Reconsideration is earnestly solicited.

Claims 7, 9 and 10 depend from claim 1 and add further distinguishing elements. There is no teaching in either claims 1 or 2 of Li '682 or in Fjaestad that would have led persons of ordinary skill in the art at the time of the invention to modify claims 1 or 2 of Li '682 in the manner proposed in the Office action, as discussed above with respect to claim 1.

Goldenburg provides none of the requisite motivation either, and thus cannot make up for the deficiencies of claims 1 and 2 of Li '682 in view of the Fjaestad with respect to claims 7, 9 and 10. Claims 1 and 2 already recite a target to be illuminated by the radiation. There is no

indication in either claim 1 or claim 2 that persons of ordinary skill in the art at the time the invention was made would have had any reason to transport the radiation anywhere besides the target, contrary to the assertion in the Office action. Claims 7, 9 and 10 are thus submitted to be allowable. Withdrawal of the rejection of claims 7, 9 and 10 is earnestly solicited.

Claim 8 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of Li '682 in view of Fjaestad and Goldenburg, and further in view of Junginger, US 3,772,506. The rejection is traversed. Reconsideration is earnestly solicited.

Claim 8 depends from claim 1 and add further distinguishing elements. There is no teaching in either claims 1 or 2 of Li '682 or in Fjaestad that would have led persons of ordinary skill in the art at the time of the invention to modify claims 1 or 2 of Li '682 in the manner proposed in the Office action, as discussed above with respect to claim 1.

Neither Goldenburg nor Junginger supply the requisite motivation either, and thus cannot make up for the deficiencies of claims 1 and 2 of Li '682 in view of the Fjaestad with respect to claim 8. Furthermore, there is no indication in either claim 1 or claim 2 that persons of ordinary skill in the art at the time the invention was made would have had any reason to conduct the radiation anywhere besides the target, as discussed above with respect to claims 7, 9 and 10, contrary to the assertion in the Office action. Claim 8 is thus submitted to be allowable. Withdrawal of the rejection of claim 8 is earnestly solicited.

Claims 28, 35, and 37 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 28 of Li, US 6,619,820 (Li '820) in view of Fjaestad. The rejection is traversed. Reconsideration is earnestly solicited.

Claim 28 recites, in pertinent part:

"a filament lamp."

Claim 28 of Li '820 neither teaches, discloses, or suggests a filament lamp. The Office action seeks to remedy the deficiencies of claim 28 of Li '820 by combining claim 28 of Li '820 with Fjaestad.

The Office action provides no motivation or suggestion to combine the teachings of claim 28 of Li '820 with Fjaestad as required by the M.P.E.P. §804, beyond an assertion that persons of ordinary skill in the art at the time of the invention would have modified claim 28 of Li

'820 in this manner "to provide light and reflect it back to the first reflector structure."

Claim 28 of Li '820, however, already provides light and reflects it back to the first reflector structure. Claim 28 of Li '820 is complete in itself. It is submitted that persons of ordinary skill in the art who read claim 28 of Li '820 and Fjaestad for all they contained would have seen no reason to modify claim 28 of Li '820 in the manner proposed in the Office action. Claim 28 is thus submitted to be allowable. Withdrawal of the rejection of claim 28 is earnestly solicited.

Claims 35 and 37 depend from claim 28 and add additional distinguishing elements. The statement in the Office action to the effect that paraboloid and symmetrical reflectors are well known is submitted to be conclusory, and does not support a conclusion that the *combinations* of elements recited in claims 35 and 37 are obvious.

Lots of things may be well known individually. Obviousness requires a showing that persons of ordinary skill in the art at the time the invention was made would have been motivated to *combine* the elements recited in claims 35 or 37, not simply that they may have known about them. Claims 35 and 37 are thus also submitted to be allowable. Withdrawal of the rejection of claims 35 and 37 is earnestly solicited.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all claims 1, 2, 4 through 10, 28, and 34 through 37 are allowable over the cited references. Withdrawn claims 3 and 11 through 27 depend from claim 1, while withdrawn claims 29 through 33 depend from claim 28. Rejoinder and allowance of withdrawn claims 3, 11 through 27, and 29 through 33 are therefore requested as well. Allowance of all claims 1 through 37 and of this entire application are therefore respectfully requested.

Respectfully submitted,

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